

In the Claims

Please cancel claims 16-35.

Please add the following claims:

42. A method for diagnosis of cancer in a subject comprising the steps:

- i)** providing a fecal sample from said subject;
- ii)** treating said fecal sample to obtain a feces-derived bacteria sample therefrom;
- iii)** identifying in the bacteria sample one or more types of bacteria; and
- iv)** determining for each of said types of bacteria its relative fraction from the total count of bacteria in said sample or in a corresponding sample;
- v)** isolating bacteria of said one or more types from said sample;
- vi)** preparing a diagnostic sample containing bacteria of the types isolated, the fraction of each of the bacteria types in said diagnostic sample corresponds to the relative fraction thereof in the fecal sample, as determined in step (iv);
- vii)** interacting said diagnostic sample with cancer cells for a time period sufficient to detect lysis of said cancer cells by said diagnostic sample, thereby determining for said fecal sample a tumor cell necrosis index (TCNI); and
- viii)** diagnosing said subject as having or not having cancer in accordance with the TCNI value determined in (vii).

43. A method for diagnosis of cancer in a subject comprising the steps:

- i)** providing a fecal sample from said subject;
- ii)** treating said fecal sample to obtain a feces-derived bacteria sample therefrom;

- iii) identifying in the bacteria sample more than one type of bacteria; and
- iv) determining for each of said more than one type of bacteria its relative fraction from the total count of bacteria in said sample or in a corresponding sample;
- v) isolating bacteria of said more than one type from said sample;
- vi) preparing a diagnostic sample containing bacteria of the types isolated, the fraction of each of the bacteria types in said diagnostic sample corresponds to the relative fraction thereof in the fecal sample, as determined in step (iv);
- vii) interacting said diagnostic sample with cancer cells for a time period sufficient to detect lysis of said cancer cells by said diagnostic sample, thereby determining for said fecal sample a tumor cell necrosis index (TCNI); and
- viii) diagnosing said subject as having or not having cancer in accordance with the TCNI value determined in (vii).

44. A method according to claim 42, wherein said bacteria are feces-derived bacteria.

45. A method according to claim 44, wherein said feces derived bacteria are selected from *E. Coli*, *Streptococcus Bovis*, and *Enterococcus* sp.

46. The method of Claim 42, wherein said fecal sample is a human fecal sample.

47. The method of Claim 46, wherein said treatment includes removal of contamination from said fecal sample to obtain an uncontaminated feces-derived bacteria sample.

48. The method of Claim 42, wherein said bacteria are isolated by colonies formation on selective culture mediums.
49. The method of Claim 42, wherein said relative fraction of each of said bacteria types is determined by calculating the percentage of said bacteria type from the total count of bacteria in the same bacteria sample.
50. The method of Claim 42, wherein said bacteria are Gram-negative anaerobic bacteria.
51. The method of Claim 50, wherein said Gram-negative anaerobic bacteria is of a genus selected from the group consisting of *Escherichia*, *Salmonella*, *Shigella*, *Klebsiella*, *Yersinia*, *Enterobacter*, *Hemophilus*, *Gardnerella* and *Pasteurella*.
52. The method of Claim 51, wherein said bacteria is *E.coli*.
53. The method of Claim 52, wherein said *E.coli* is isolated from said fecal sample by culturing the feces-derived sample of bacteria on a culture medium selective for *E.coli*.
54. The method of Claim 53, wherein the culture medium is selected from the group consisting of MacConkey agar and m-Endo agar.
55. The method of Claim 49, wherein said bacteria are Gram-positive bacteria.
56. The method of Claim 55, wherein said Gram-positive bacteria is of a genus selected from the group consisting of *Staphylococcus*, *Enterococcus*, *Streptococcus*, *Lactococcus*.

- 57.** The method of Claim 56, wherein said bacteria is *Streptococcus bovis* and/or *Enterococcus sp.*
- 58.** The method of Claim 57, wherein Enterococci coliform is isolated from said fecal sample by culturing the feces-derived sample of bacteria on a culture medium selective for Enterococcus.
- 59.** The method of Claim 58, wherein said culture medium is selected from the group consisting of Slanetz-Bartley agar and Bile-esculine-azide agar.
- 60.** The method of Claim 42, wherein said cancer cells are a standard culture of cancer cells.
- 61.** The method of Claim 60, wherein said standard culture of cancer cells has the accession No. ATCC HTB-22 (MCF7).
- 62.** The method of Claim 42, wherein said mixture is interacted with the cancer cells for a time period sufficient to determine the extent of interaction between the bacteria and the cancer cells.
- 63.** The method of Claim 62, wherein the number of interacted and/or non-interacted cancer cells present at the end of said time period is determined, based on which a tumor cell necrosis index (TCNI) is calculated.